

## ABSTRACT

A DC mitigation circuit for mitigating the effects of DC in power systems, and a method for doing the same, are provided. The DC mitigation circuit comprises a control circuit for evaluating the amount of DC or harmonic currents resulting from the DC in a  
5 transmission line. Switches provide a current to a winding of a transformer, and are controlled by the control circuit. The current provided to the winding generates a magnetic flux that offsets a flux created by DC or harmonic currents resulting from the DC induced by geomagnetically-caused ground-induced currents in the transmission line.